

2015-2020 Financial Forecast

Water, Sewer, and Storm & Surface Water Funds

The Utilities Department operates as an enterprise within the City structure and functions much like a private business entity. The Department does not receive any General Fund funding and relies primarily on rates to fund its operating and capital programs. The proposed rates presented herein are designed to generate sufficient revenues to fund the Utilities 2015-2016 budget proposals, which include operations, asset replacements (e.g., vehicles), capital investment programs (CIP), and the long-term Renewal and Replacement (R&R) requirements. The proposed rates are lower than those presented in the Early Outlook forecast and reflect updated utility cost projections including further evaluation and smoothing of the rate impact from funding the Utilities capital needs.

The Utilities Department faces the following key challenges and constraints in the 2015-2016 biennium:

1. Challenges
 - a. Capital infrastructure is aging. Utilities operates a highly capital-intensive business, and the Department's ability to deliver quality services to its customers is dependent on the ability of each system to function on demand, every day of the year.
 - b. Supporting economic growth. Additional infrastructure capacity is needed to support development and population growth.
 - c. Operational efficiency. We are mindful of the need to operate efficiently and continually evaluate business processes to seek opportunities to effectively deliver services in a more cost-effective manner.
2. Constraints
 - a. Fixed cost structure. Expenditures are largely fixed, with the majority of these costs used to pay financial obligations, including payments to external and internal service providers and taxes.
 - b. Legal mandates. Utilities must comply with State and Federal mandates, such as the National Pollution Discharge Elimination System (NPDES), to protect drinking water and surface water quality.

Within this context, the proposed 2015-2016 Utilities budget was prepared with the following guiding principles:

1. Lean operations
 - a. Continued cost containment with no restoration of prior operational/staffing cuts
 - b. No new FTEs for operations
 - c. Local cost increases below inflation
2. Fully funded wholesale cost increases so local programs are not degraded
3. Field staff efficiency
 - a. The Department is proposing one new request (\$1.0 million and 1.0 LTE) for the 2015-2016 biennium – funding of a mobile workforce initiative to improve operational efficiency of field staff. This proposal is discussed in greater detail below.
4. Support of the CIP
 - a. The Department is proposing the addition of 4.0 FTEs and 1.0 LTE to support the delivery of the current and proposed Utilities CIP. Additionally, 2.0 FTEs are proposed to support the East Link project. This proposal is also discussed in greater detail below.



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PROPOSED 2015-2016 UTILITY RATES

The following table summarizes the rate adjustments necessary to support the proposed 2015-2016 budget for the Water, Sewer, and Storm and Surface Water utilities by rate drivers.

Table 1: 2015-2016 Rate Drivers

	<u>WATER</u>		<u>SEWER</u>		<u>STORM</u>		<u>TOTAL</u>	
	<u>2015</u>	<u>2016</u>	<u>2015</u>	<u>2016</u>	<u>2015</u>	<u>2016</u>	<u>2015</u>	<u>2016</u>
Wholesale	1.8%	1.4%	4.8%	0.0%	0.0%	0.0%	2.5%	0.6%
Local								
CIP/R&R	1.7%	1.7%	0.7%	1.1%	2.7%	2.9%	1.2%	2.6%
Taxes/Interfunds	0.1%	0.4%	0.3%	0.3%	0.5%	0.6%	0.2%	0.5%
Operations	<u>1.6%</u>	<u>1.7%</u>	<u>0.7%</u>	<u>1.6%</u>	<u>0.9%</u>	<u>0.6%</u>	<u>1.8%</u>	<u>0.3%</u>
Local subtotal	3.4%	3.8%	1.7%	3.0%	4.1%	4.1%	3.2%	3.4%
Total Rate Increase	<u>5.2%</u>	<u>5.2%</u>	<u>6.5%</u>	<u>3.0%</u>	<u>4.1%</u>	<u>4.1%</u>	<u>5.7%</u>	<u>4.0%</u>

Minor differences may exist due to rounding.

Water Utility cost of service (COS) adjustments

In 2014, Utilities conducted a comprehensive cost-of-service evaluation of the water utility. The purpose of the study is to determine whether any adjustments to current water utility rates are needed to ensure each customer class pays their equitable share of water system costs and is revenue neutral. The findings and recommendations of this study indicate a shift of \$510,000 or 1.2% of total service revenues from single-family to commercial and multifamily customers. Of this amount, \$485,000 represents a shift to commercial customers or 6.0% of the service revenues collected from commercial customers. The results of this study are reflected in the proposed 2015-2016 utility rates.

Net Rate Impact Including COS and 2015-2016 Rate Increases

The following table summarizes the impact of the water cost of service rate adjustments and the rate increases needed to fund the proposed 2015-2016 budget, along with sample monthly bills under each customer class:

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Table 2: 2015-2016 Sample Monthly Bills
Includes Water Cost of Service based rates in effect starting 2015

	2014 Current Monthly Utility Bill	2015 Proposed Monthly Utility Bill	% Change	2016 Proposed Monthly Utility Bill	% Change
Single Family					
Water	\$54.13	\$56.20	3.8%	\$59.10	5.2%
Sewer	\$68.64	\$73.13	6.5%	\$75.35	3.0%
Storm and Surface Water	<u>\$21.19</u>	<u>\$22.06</u>	<u>4.1%</u>	<u>\$22.95</u>	<u>4.0%</u>
Total	\$143.96	\$151.39	5.2%	\$157.40	4.0%
Multifamily					
Water	\$569.99	\$566.78	-0.6%	\$596.49	5.2%
Sewer	\$785.91	\$836.86	6.5%	\$861.84	3.0%
Storm and Surface Water	<u>\$330.95</u>	<u>\$344.50</u>	<u>4.1%</u>	<u>\$358.51</u>	<u>4.1%</u>
Total	\$1,686.85	\$1,748.14	3.6%	\$1,816.84	3.9%
Commercial					
Water	\$4,735.63	\$5,352.66	13.0%	\$5,632.00	5.2%
Sewer	\$8,818.60	\$9,388.22	6.5%	\$9,673.03	3.0%
Storm and Surface Water	<u>\$1,629.88</u>	<u>\$1,696.59</u>	<u>4.1%</u>	<u>\$1,765.61</u>	<u>4.1%</u>
Total	\$15,184.11	\$16,437.47	8.3%	\$17,070.64	3.9%

The following section provides further detail on the key rate drivers for the proposed 2015-2016 Utilities budget.

Payments to External Service Providers

Wholesale Costs

The single largest cost center for the Utilities Department is wholesale costs, which include expenses related to the purchase of water supply from the Cascade Water Alliance (Cascade) and payments to King County for wastewater treatment. Combined, these expenses total \$107.8 million for the 2015-2016 biennium, or approximately 34% of the combined water, sewer, and storm and surface water budgets.

The cost from Cascade to purchase water supply is projected to increase from \$18.2 million in 2014 to \$18.9 million in 2015 and \$19.5 million in 2016. The impact of this cost increase to the Bellevue retail water rate is 1.8% and 1.4% in 2015 and 2016, respectively.

The cost from King County for wastewater treatment is projected to increase from \$30.0 million in 2014 to \$32.4 million in 2015 and 2016. The impact of the cost increase to the Bellevue retail sewer rate is 4.8% in 2015, with no increase in 2016.

To ensure that local operations and the CIP are not degraded, the Department's proposed 2015-2016 budget is consistent with the Council-adopted financial policy which directs rate increases necessary to fund wholesale costs be passed directly through to the customer.



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Local Costs

CIP / Renewal and Replacement

Outside of wholesale costs discussed above, the next largest cost driver for the Utilities Department is the CIP and the cost to renew and replace infrastructure in the future. Utilities infrastructure has a replacement cost of over \$3.5 billion, and most of the systems are well past their mid-life. As a result, the systems used to deliver water, convey wastewater, and manage stormwater runoff are experiencing more failures, and the cost to maintain, operate, rehabilitate, and replace this infrastructure is increasing. To minimize costs and optimize the integrity of the utility systems, the Utilities Department has developed a strategic 75-year asset management plan to systematically replace or set aside funding for the future renewal and replacement of these assets. Consistent with Council-adopted financial policy, this long-term funding strategy is also designed to smooth future rate increases and provide for intergenerational equity.

Major projects supported by the proposed 2015-2021 CIP include small diameter water main replacements (\$60.8M), water pump station repairs (\$13.7M), sewer system pipeline repairs (\$12.8M) and pump station improvements (\$8.4M), storm system conveyance repairs and replacements (\$7.8M), and stream restoration for the Mobility and Infrastructure Initiative (\$8.3M). Proposed CIP projects to support utility capacity to accommodate growth include Bellefield sewer pump station capacity improvements (\$8.6M), Wilburton sewer capacity upgrades (\$6.2M), and constructing a new water inlet station (\$5.2M). Utility relocations related to the East Link project, totaling \$7.7M, will be funded by the R&R accounts in the water, sewer and stormwater utility funds. They will not have a retail rate impact in 2015-2016.

As discussed above, the Department is proposing to add 5.0 staff positions to support the delivery of the CIP. This includes 2.0 FTE Senior Engineers, 2.0 FTE Senior Construction Project Inspectors and 1.0 LTE Senior Engineering Technician. These positions will be instrumental to providing the additional capacity needed for Utilities to ensure the existing and proposed CIP is delivered as planned. Approval of these proposed FTEs will increase the number of Utilities Department staff dedicated to the delivery of the CIP to 27.21 FTEs/LTEs. Additionally, 2.0FTE Inspectors are proposed to support the East Link project.

Taxes/Internal Service Providers

Taxes and interfund payments represent approximately 14% of the total budget for the Utilities Department, or approximately \$40M for the 2015-2016 biennium. The amount of taxes paid is based upon the amount of revenue collected and the tax rates assessed by the State and cities. No changes to the current State and city tax rates are assumed in the proposed budget. Interfund payments represent costs that Utilities pays to the General Fund for support services. The portion of the rate increase attributable to taxes and interfund payments is less than 1.0% within each utility.

Operations

Operating costs include personnel, supplies, and professional service expenses that are necessary to carry out the daily functions of the Utilities Department. This cost category totals \$49M, or about 25% of the Utilities budget for the 2015-2016 biennium. As discussed above, the proposed budget does not restore any budget or staffing reductions that were implemented in the previous biennium. No new FTEs are being proposed for operations. The proposed number of FTEs and LTEs dedicated to the daily operations of the water, sewer, and storm and surface water utilities is 143.54. This level also includes 0.19 FTE needed to comply with provisions of the federal Affordable Care Act.



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Operations – New Service Level Request

\$1.0 million and a new 1.0 LTE Business Process Analyst is proposed by the Utilities Department to acquire and implement mobile technology (i.e., tablets and smartphones) that will enhance the efficiency and effectiveness of field staff. Currently field staff has responsibility for performing operations and maintenance activities over a 37- square-mile area. Their offices are located at the Bellevue Service Center in the north side of the city, and staff is in the field 75% to 90% of their typical day. By providing staff the technological tools to conduct their field work more efficiently and effectively, these tools are expected to result in time savings by eliminating duplicative data entry and lowered printing costs and is estimated to save up to 2,000 staff hours by 2016.

Emerging Issue

Advanced Metering Infrastructure (AMI): Utility water service to customers is currently measured using water meters. These meters are manually read once every two months. Information from these bi-monthly reads form the basis of the current bi-monthly water and sewer utility billings. Over the past several years, the Utilities Department has evaluated the feasibility of migrating to an advanced technology that uses radio or cellular signals to securely measure and transmit water usage information. AMI technology reduces labor costs for performing manual meter reads, enables customers to have easier access to real-time water usage information, and facilitates more proactive leak detection in private water systems.

On September 18, 2014, the Utilities Department presented a recommendation to the Environmental Services Commission (ESC) to position for full implementation of AMI in the 2017-2020 timeframe by taking the following steps:

1. Postpone current meter replacement where feasible;
2. Implement rate increases in 2015-2016 to begin saving for AMI implementation; and
3. Study AMI technology options in 2016.

The ESC unanimously supported the Utilities Department's recommendation.

Based on preliminary evaluation, the new funding needed to replace the existing water metering system with AMI technology and operate the new AMI system over 20 years is estimated at \$11.0 million. AMI meters are expected to have a 20 year operating life, at which time each meter will need to be replaced. Since meters are currently not in the renew and replacement program, the new funding needed to initially implement, operate, as well as to collect sufficient revenues to replace all of the meters at the end of their 20 year life is estimate at \$37.5 million. The cost of this technology is expected to be shared equally between the water and sewer utilities as both utilities utilize water usage readings from water meters for utility billing and operational needs.

The following table presents potential funding strategies for these two options. It is important to note that funding for AMI is not included in the Utilities Department's proposed 2015-2016 budget and rates. Express approval by the City Council with corresponding amendment to Utilities' water and sewer rates, as outlined below, will be needed to fund the selected AMI option.



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Table 3. Estimated Rate Impact to Fund AMI

Option 1: Implementation <i>\$11.0 million in new funding needed</i>	Option 2: Implementation and Replacement Reserve <i>\$37.5 million in new funding needed</i>
<ul style="list-style-type: none">• 0.6% increase in water rate in 2015• 0.4% increase in sewer rate in 2015	<ul style="list-style-type: none">• 0.6% increase per year in water rate in 2015-2018• 0.4% increase per year in sewer rate in 2015-2018

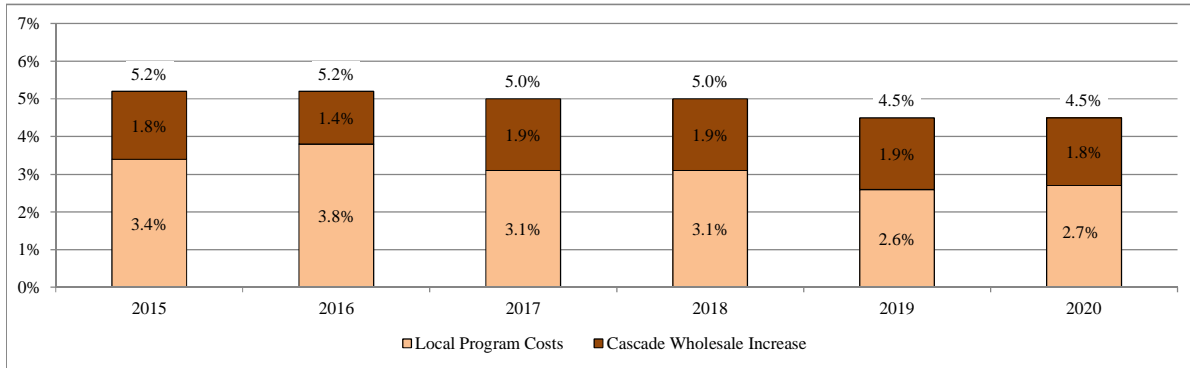
The impact to the typical residential combined monthly utility bill is approximately \$0.60 in 2015 and 2016 under option 1. The impact to the typical residential monthly bill is approximately \$0.60 and \$1.25 in 2015 and 2016, respectively, under option 2.

2015-2020 Financial Forecast

The following pages provide a more in-depth discussion of the individual rate drivers and forecasted rate adjustments through the year 2020 for the water, sewer, and stormwater utilities.

**WATER UTILITY FUND
2015 - 2020 Preliminary Rate Forecast**

PROJECTED RATE INCREASES



Impact to Monthly Bill for a Typical Residential Customer						
	2015	2016	2017	2018	2019	2020
Prior Year Bill	\$53.42 *	\$56.20	\$59.10	\$62.05	\$65.15	\$68.08
Increase:						
Cascade Wholesale						
Purchased Water	0.96	0.79	1.12	1.18	1.24	1.23
Local	1.82	2.11	1.83	1.92	1.69	1.84
Total	\$2.78	\$2.90	\$2.95	\$3.10	\$2.93	\$3.07
Projected Bill	\$56.20	\$59.10	\$62.05	\$65.15	\$68.08	\$71.15

Minor differences may exist due to rounding.

** Reflect 2014 cost of service rates.*

Key Rate Drivers

• **Wholesale Costs**

Drinking water for the City of Bellevue is provided by the Cascade Water Alliance. Cascade costs are increasing primarily due to water purchase costs from Seattle and costs related to Lake Tapps operations. Per City financial policy, the wholesale cost of purchased water services are passed directly through to the ratepayer. Retail rate impacts of the projected increases in Cascade's wholesale costs to Bellevue are 1.8% for 2015 and 1.4% for 2016. Beyond that, the anticipated retail rate impacts due to Cascade's projected cost increases to the City of Bellevue average 1.9% per year for 2017 through 2020.

• **Capital Program**

The proposed 2015-2021 Water Capital program includes \$103.8 million in investments to preserve and protect system assets. The Water utility is in active system replacement and the majority of the proposed capital program (\$91 million) will be invested to replace existing aging infrastructure. Significant projects include small diameter water main replacement and water pump station repair and replacements. The remaining water capital program includes projects to accommodate growth and the relocation of utility assets related to the East Link light rail project. Capital costs will require rate increases of 1.7% in 2015 and 2016, respectively, and an average of about 1.4% per year thereafter.

• **Taxes/Intergovernmental**

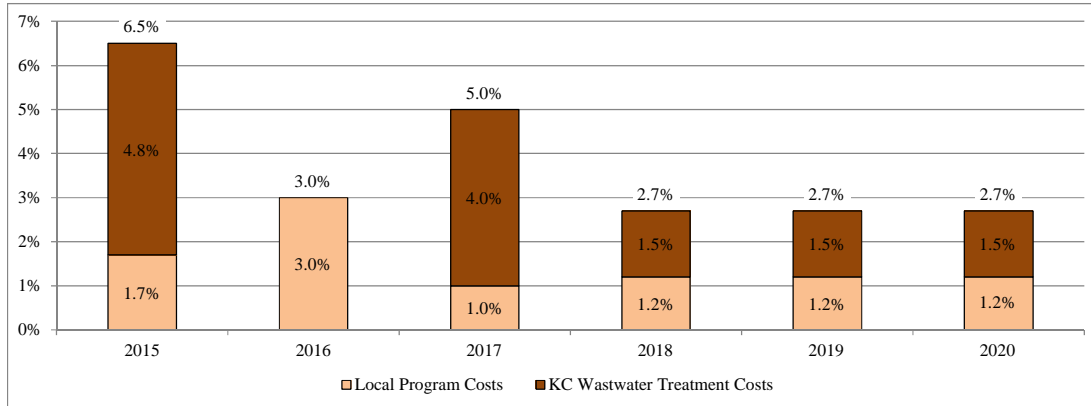
Taxes and interfund payments to other City departments will require rate increases of about 0.1% in 2015 and 0.4% in 2016. Increases for the remainder of the forecast period will average 0.9%.

• **Operations**

Projected operating costs will require rate increases of about 1.6% in 2015 and 1.7% in 2016, and an average of about 0.5% per year thereafter, largely due to increases in medical and other benefits and inflationary costs. This is consistent with projections for other City departments. The forecast includes no new FTEs for operations during this forecast period.

**SEWER UTILITY FUND
2015 - 2020 Preliminary Rate Forecast**

PROJECTED RATE INCREASES



Impact to Monthly Bill for a Typical Residential Customer						
	2015	2016	2017	2018	2019	2020
Prior Year Bill	\$68.64	\$73.13	\$75.35	\$79.11	\$81.25	\$83.45
Increase:						
KC Wastewater Treatment	3.29	0.00	3.01	1.19	1.22	1.25
Local	<u>1.20</u>	<u>2.22</u>	<u>0.75</u>	<u>0.95</u>	<u>0.98</u>	<u>1.00</u>
Total	<u>\$4.49</u>	<u>\$2.22</u>	<u>\$3.76</u>	<u>\$2.14</u>	<u>\$2.20</u>	<u>\$2.25</u>
Projected Bill	\$73.13	\$75.35	\$79.11	\$81.25	\$83.45	\$85.70

Minor differences may exist due to rounding

Key Rate Drivers

• **Wholesale Costs**

Per King County, the Wastewater Treatment Division's costs are increasing primarily due to ongoing debt service and capital program costs, the replenishment of reserves used for rate stabilization and general operating costs. The wholesale wastewater treatment rate is established by the County for a two-year period starting 2015, and per City financial policy, are passed directly through to the ratepayer. The retail rate impacts of the projected increases in wastewater treatment costs to Bellevue are 4.8% in 2015, 4.0% in 2017, and 1.5% per year for 2018 through 2020.

• **Capital Program**

The proposed 2015-2021 Sewer Capital program includes \$60.2 million in investments. The Sewer utility is beginning systematic asset replacement. Approximately half of the proposed capital program (\$36 million) will be invested to replace existing aging infrastructure. Significant projects include sewer system pipeline major repairs, sewer pump station improvements and sewer system pipeline replacements. The remaining sewer capital investments include projects to accommodate growth and include capacity improvements for the Bellefield sewer pump station, Wilburton sewer capacity upgrades, and relocation of utility assets related to the East Link light rail project. Capital costs, including transfers to the R&R account, will require rate increases of 0.7% and 1.1% in 2015 and 2016, respectively, and an average of 0.5% per year thereafter.

• **Taxes/Intergovernmental**

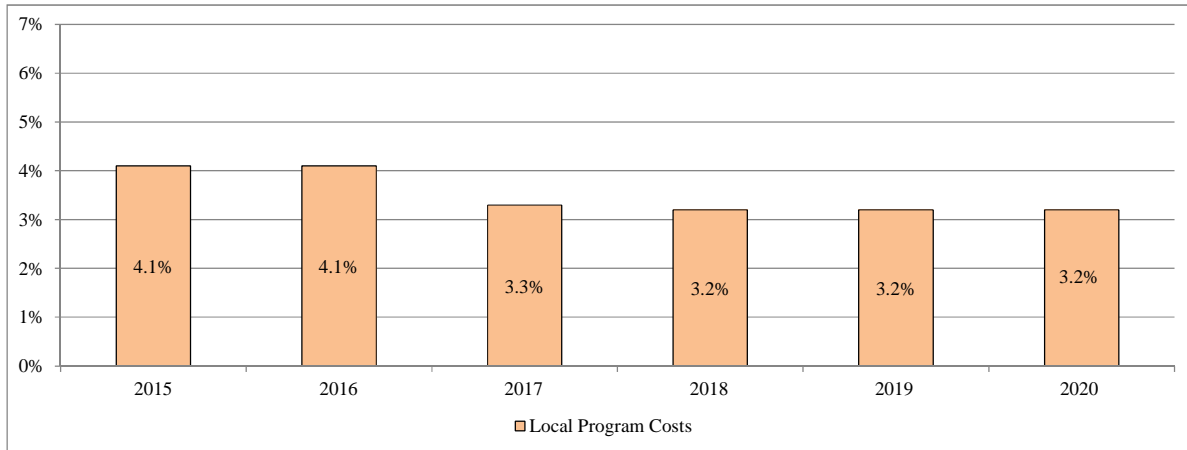
Taxes and interfund payments to other City departments will require rate increases of 0.3% in 2015 and 2016 and an average of 0.3% per year thereafter.

• **Operations**

Operating costs will require rate increases of about 0.7% and 1.6% in 2015 and 2016 and an average of 0.3% per year for the remainder of the forecast period, largely due to increases in medical and other benefits and inflationary costs. This is consistent with projections for other City departments. The forecast includes no new FTEs for operations during this forecast period.

**STORM AND SURFACE WATER UTILITY FUND
2015 - 2020 Preliminary Rate Forecast**

PROJECTED RATE INCREASES



Impact to Monthly Bill for a Typical Residential Customer

	2015	2016	2017	2018	2019	2020
Prior Year Bill	\$21.19	\$22.06	\$22.95	\$23.71	\$24.47	\$25.25
Increase	<u>\$0.87</u>	<u>\$0.89</u>	<u>\$0.76</u>	<u>\$0.76</u>	<u>\$0.78</u>	<u>\$0.81</u>
Projected Bill	\$22.06	\$22.95	\$23.71	\$24.47	\$25.25	\$26.06

Minor differences may exist due to rounding

Key Rate Drivers

• **Capital Program**

The proposed 2015-2021 Stormwater Capital program includes \$47.1 million in investments. Over half (\$28.7 million) of the Stormwater utility capital investments are for environmental preservation and include stream restoration for the Mobility and Infrastructure Initiative, mitigating flood hazards, and constructing fish passage and stream improvement projects. The remaining capital investments include enhancing current pipeline video inspection efforts to evaluate current infrastructure condition, storm system conveyance repairs and replacement, including replacing the NE 8th Street culvert at Kelsey Creek. Capital costs, including transfers to the R&R account, will require rate increases of 2.7% and 2.9% in 2015 and 2016, respectively, and an average of about 1.5% per year thereafter.

• **Taxes/Intergovernmental**

Taxes and interfund payments to other City departments will require rate increases of about 0.5% and 0.6% in 2015 and 2016, respectively, and increases averaging about 0.8% per year thereafter.

• **Operations**

Operating costs will require rate increases of about 0.9% and 0.6% in 2015 and 2016, respectively, and about 1.0% per year thereafter, largely due to increases in medical and other benefits and inflationary costs. This is consistent with projections for other City departments. The forecast includes no new FTEs for operations during this forecast period.